



**October Meeting
At the Museum of Arts and
Sciences on Monday,
October 05, 2015 at
7:30pm.**

Speaker for the September meeting will be Lori Carter. She will be speaking on Sand, and the many different minerals, rocks, and organic materials that make up sand. Plus what types of sand can be found around the world.

President's Message

We had a good meeting this month. Kim Cochran came and spoke to us about the geologic history of Africa and the minerals and gemstones found there. We appreciate his presentation and his time. I want to remind people that the fair is coming up in a few weeks and we want to ask people to volunteer to assist at the fair. We need to have your names turned in to Susan in the next few weeks so she can get the tickets and parking passes in time to get them to you. As usual, we need people for morning and afternoon shifts, but it is your choice. We will also be selling grab bags to raise money for the club.

Let's keep Rene and Betty Sue Smith in mind as they are not in the best of health.

Rene is suffering from liver problems and is in dire need of prayers and good wishes. Betty Sue is at home now and is doing better than she was but is still in need of prayers and good wishes too. We are off to a great start this year and I hope we can grow more after the fair.

As we head into the cooler months ahead, let's not forget some of the basics of collecting in cold weather.

Wear a warm coat/jacket/or sweater that can be removed when it gets warmer.

Wear gloves to protect the hands from not only the cold but from the water as well-water and mud below 50° can cause your fingers to go numb and can put them at risk to severe injury where you are not aware of it.

Wear warm socks and shoes/boots for the same reason of protection against hypothermia.

As usual, wear your hard hats and safety glasses at all times in the mines.

Make sure you drink plenty of fluids. Be careful and enjoy yourself while digging.

As usual, if you have any ideas for a dig, a program, or a speaker, give me a call or send me an email. Also, if you have any ideas for attracting new members, let us know too.

Your president,
Jim Souter
jgsouter@windstream.net
478.454.7273



Dues are Due

Another year has gone by in no time. It's that time of the year to pay dues. They remain the same 10 dollars for each adult and 2.50 for children under 18 years of age. They are due by November 1st.

Officer Election Time is here Again!

It is time to start thinking who will be next years Officers (President, Vice-President, Secretary, and Treasurer). If you are interested in any of the positions please let Jim know ASAP. They could use a break so please step up to the plate and become an office of our club.

September Meeting Minutes

The meeting was called to order at 7:31 PM by our president James Souter with 17 members/guests present.

Old Business

There was no old business that was discussed by the membership.

New Business

We wish to remember Renee and Betty Sue in your prayers as Renee is not healthy enough for a much needed liver transplant. Betty Sue has had one of her legs recently amputated and is going in for a new prosthetic.

The museum kindly let us view one of their newest exhibits, "Science on a Sphere." It is quite an unusual display and very informative. He ran us through some of its capabilities.

A volunteer signup sheet for our club display was started for the upcoming state fair. The mineral of the month is Azurite. It was talked about how closely related it is to Malachite with some nice specimens brought in and discussed.

Kim Cochran was our visiting speaker. He gave a talk on minerals and gemstones from the continent of Africa. It was highly informative and quite interesting. The primary minerals discussed were Garnets, Diamonds and Tourmaline. He explained some of the different varieties of each depending on the various inclusions and location where they were mined. For example some of the Tourmaline specimens were further divided into newer groups based on recent atomic evaluation. A question and answer session was provided at the end of his talk. A great thanks once again goes out to Mr Cochran.

The meeting was adjourned at 9:19 PM.

By: Richard Arnold

Perry Fair News

We will be setting up the Club's display at the Georgia National Fair in Perry again this year.

We'll prepare the display cases and install all the specimens & items in preparation of the Fair that will run October on Saturday September the 26th please call Susan if you would like to help!

8 – 18th. The cases will be locked by the Fair personnel once we are finished. All specimens will be marked by means of a



colored coded dot assigned to each person displaying items.

Please sign up to docent --- Contact Susan Hargrove by phone, email before the October meeting, if you have not done so already, to be placed on the schedule to docent during the Fair. You do not have to demonstrate but you are welcome to do so. If you would like to demonstrate please arrange for any tools or equipment you will need. No one is allowed to sell any items unless they are demonstrating and anything sold must be made by you using lapidary related abilities/skills. The space provided for items offered for sale is limited (approximately 2 x 3 feet).

We need members to be at our display to talk with the public about the display and the club. Jay does a great job supplying labels so usually almost every item is labeled. If you docent you will receive a parking pass (to park at the building where the display is housed) and entry tickets. Susan needs to know what day (or days) and time (morning, afternoon, evening) you are available by our next meeting September 1st. Tickets and parking passes will be mailed to you by the Fair. You are welcome to bring specimens you have collected or lapidary related items you have made, as "show & tell" while you docent. People are generally eager to see what's available to be collected and share stories of their collecting.

Contact Susan at susanbphilh@pstel.net or call 478-837-5327.

Thanks and see you at the Fair!



Green olivine sand from Papakolea Beach, Hawaii

Mineral of the Month Sand

The word "sand" is actually used for a "particle size" rather than for a "material."

Sand is a naturally occurring granular material composed of finely divided rock, organic materials, and mineral particles. It can be composed of mineral material such as quartz, orthoclase or gypsum; organic material such as mollusk shells, coral fragments or radiolarian tests; or rock fragments such as basalt, pumice or chert. It is defined by size, being finer than gravel and coarser than silt. Sand can also refer to a textural class of soil or soil type; i.e. a soil containing more than 85% sand-sized particles (by mass).

In terms of particle size as used by geologists, sand particles range in diameter from 0.0625 mm (or $\frac{1}{16}$ mm) to 2 mm. An individual particle in this range size is termed a *sand grain*. Sand grains are between gravel (with particles ranging from 2 mm up to 64 mm) and silt (particles smaller than 0.0625 mm down to 0.004 mm).



The most common constituent of sand, in inland continental settings and non-tropical coastal settings, is silica (silicon dioxide, or SiO_2), usually in the form of quartz, which, because of its chemical inertness and considerable hardness, is the most common mineral resistant to weathering.

The composition of mineral sand is highly variable, depending on the local rock sources and conditions. The bright white sands found in tropical and subtropical coastal settings are eroded limestone and may contain coral and shell fragments in addition to other organic or organically derived fragmental material, suggesting sand formation depends on living organisms, too.^[3] The gypsum sand dunes of the White Sands National Monument in New Mexico are famous for their bright, white color. Arkose is a sand or sandstone with considerable feldspar content, derived from weathering and erosion of a (usually nearby) granitic rock outcrop. Some sands contain magnetite, chlorite, glauconite or gypsum. Sands rich in magnetite are dark to black in color, as are sands derived from volcanic basalts and obsidian. Chlorite-glauconite bearing sands are typically green in color, as are sands derived from basaltic (lava) with a high olivine content. Many sands, especially those found extensively in Southern Europe, have iron impurities within the quartz crystals of the sand, giving a deep yellow color. Sand deposits in some areas contain garnets and other resistant minerals, including some small gemstones. Where sand accumulates in large quantities, it can be lithified into a sedimentary rock known as sandstone.

The study of individual grains can reveal much historical information as to the origin and kind of transport of the grain. Quartz sand that is recently weathered from granite or gneiss quartz crystals will be angular. It is called *grus* in

geology or *sharp sand* in the building trade where it is preferred for concrete, and in gardening where it is used as a soil amendment to loosen clay soils. Sand that is transported long distances by water or wind will be rounded, with characteristic abrasion patterns on the grain surface. Desert sand is typically rounded. People who collect sand as a hobby are known as arenophiles.



Heavy mineral sand containing abundant garnet from Alma Gulch, Cape Nome, Alaska



Field trips coming up, lets go digging!!!

**DMC Program of the
SFMS Field Trip
Committee**



**Middle Tennessee Rockhounds,
Nashville, TN (HOST)
An Official Field Trip of the Mid-Ga
Gem and Mineral Society, Inc.**

**Saturday October 3, 2015
10AM – 2PM CST
Coon Creek Science Center
McNairy County, Tennessee
FEE \$15 – Limited to 35
participants**

**Note from Jay: Sorry I did not get
this to ya'll sooner. I was out of
town when this came in!**

Description: Within the grounds of Coon Creek Science Center, located in rural McNairy County, Tennessee, lies one of the most important fossil sites in North America. Acquired by the Memphis Museum System in 1988, this property contains a treasure lode of superbly preserved Upper Cretaceous marine shells and vertebrate remains left there 70 million years ago when the water of the Gulf of Mexico receded. Coon Creek fossils are mostly marine invertebrates (clams, snails, oysters, shrimp etc.) that are about 75 million years old. They are found in an unconsolidated clay/sand matrix. Coon Creek fossils are very unique because of the state of their preservation. They are original material – the shells have not turned to stone. They are also very abundant with a huge variety of species. Collecting will take place in a “quarry” area.

You will be “carving” fossils out of the Coon Creek formation by looking through chunks of the formation that have been loosened from the quarry. Participants will use a curved linoleum knife for collecting. Museum instructors will demonstrate how to collect your fossils and how to clean them. Everyone will find fossils! Some of the fossils are very fragile. The program includes time for surface collecting in Coon Creek for fossils that have been washed into the stream bed gravel. This will be guided by the museum staff. You keep what you find with a few exceptions. If you find a specimen that would be beneficial for the Museum’s collection or research, the Museum reserves the right to keep that fossil. See also: http://www.memphismuseums.org/coon_creek-overview

Program – Field Paleontology (4 Hours):
Introduction – 30 minutes; Collecting Session (quarry and surface) – 2 Hour; Lunch – 30 minutes; Clean and Identify Fossils - 45 minutes

Registration Procedure: After you supply required information by email to Middle Tennessee Rockhounds (MTR), MTR will assign you a registration number by return email – bring registration number the day of the fieldtrip. [Instructions for mailing the \$15 per participant fee will be included with registration number.] Once registration



reaches 35, registration is closed. **To register**, email MiddleTnRockhounds@gmail.com with: **Name(s; Last, First), Address/ City/State, Phone (include cell for day of trip), club, age of children (must be 10 to 17 years old and accompanied by a parent or a guardian)**. Registration request are limited to family members, couples, and significant others; non-related individuals must email separate registration request. ***All persons who attend DMC fieldtrips (including children), must be members, in good standing, of an SFMS club (who has provided their membership with SFMS liability insurance).***

Children: Yes (see stipulations in registration above; no children under 10 per Coon Creek Science Center)

Pets: No

Rain or Shine: This fieldtrip is rain or shine. The Science Center will cancel only if weather conditions are threatening.

Bring: Boots or shoes that can get wet/dirty, poncho, towel, change of clothes & shoes (for return home), lunch (there is no food nearby & no vending machines at the center), water, bucket, small digging tool (optional; linoleum knives will be furnished),

roll of aluminum foil (to protect your finds), and bug spray.

Address: 2985 Hardin Graveyard Road, Adamsville, TN (approximately 2.5 hours from Nashville; approximately 2 hours from Memphis)

Directions: [Click on Coon Creek Science Center Map](#), then click Directions in upper left-hand box and enter your city. See also: http://www.memphismuseums.org/coon_creek-map

Lodging & Camping: Rooms are available in nearby Henderson and Savannah, Tennessee. Campsites are available at Chickasaw State Park (<http://tnstateparks.com/parks/about/chickasaw>) and Mousetail Landing State Park (<http://tnstateparks.com/parks/about/mousetail-landing>).

Contact: Mike Mangrum, Fieldtrip Chair, MTR; 615-587-1733; Mangrum1972@bellsouth.net or John Stanley, President, MTR; 615-424-2664; istanley@picagroup.com (no calls after 10pm CST; leave message if no answer); to register for fieldtrip email MiddleTnRockhounds@gmail.com.



Graves Mountain "Rock Swap and Dig"

October 2nd to 4th

8 am to 6 pm, Friday, October 2, 2015

8 am to 6 pm, Saturday, October 3, 2015

8 am to 6 pm, Sunday, October 4, 2015

"You are invited to field collect minerals at Georgia's premiere mineral location!"

The caretaker in charge of Graves Mountain, Clarence Norman Jr., has announced plans to hold two three day digs and rock swaps on the Mountain during the current year. He will have the mountain open to collecting from 8 am to 6 pm each day. All participants must stop at the welcome table in the Hospitality tent to sign a liability release and make a small contribution to defray the cost of opening the mountain and providing port-o-lets. There will be several golf cart type, four wheeled vehicles available to transport those participants who have trouble walking long distances. The dig will cease and everyone is expected to be off the mountain by around 6 pm each day. Participants will be allowed to park in a designated area on the mountain.

Rock Swap and Hot Food/Drinks:
Junior will set aside an area in the upper parking lot for tables to be setup for daily rock swaps. Anyone who would like to setup a table(s), please contact Junior at the phone numbers listed below. Hot

food cooked on the grill, cold drinks and chips will be available for purchase on the mountain during all three days of these events. Don't forget to bring some extra money to buy the special "Graves Mountain Rock Swap and Dig" T-shirt!

**THESE DIGS ARE OPEN TO ALL.
NO NEED TO SIGN-UP, JUST
SHOW UP FOR ALL "ROCK SWAP
AND DIGS"!**

**Mark your calendar and tell all your
friends about these great events!**

Contact Information:

Clarence Norman Jr. (Junior) -
706.359.1544 (his business)
or 706.401.3173 (his cell)

Graves Mountain is accessible and open for mineral collecting by colleges, universities, and gem and mineral societies. Groups as small as two INDIVIDUAL mineral collectors can now reserve the mountain!

In order to gain access, (except for the two yearly "Rock Swaps and Digs") you will need to contact the caretaker, Clarence Norman, Jr (Junior) at 706.359.3862 (his business) or 706.401.3173 (his cell). Give him a call and he can reserve the mountain exclusively for your group. All of the mineral societies that come here to collect, offer the caretaker a donation for his trouble and effort in keeping the mountain open and assessable to them. Please consider what it is worth to your mineral society to be able to



field collect minerals at Georgia's premiere mineral location!

Graves Mountain code of conduct!

Park your vehicle in the designated area(at the end of the paved access road but not much beyond the woods to the right of this road).

NO child under the age of 12 years old is to be allowed on the mountain because of all the dangers involved. **ALL CHILDREN WILL BE ALLOWED DURING THE "Rock Swap and Digs" IF EACH CHILD IS UNDER STRICT ADULT SUPERVISION!**

ALL pets must be kept under control and on a leash.

The caretaker, Junior Norman, has final and absolute say as to where you may safely work.

Ladders or power tools of any kind will not be allowed. (**HAND TOOLS ONLY!**)

STAY AWAY FROM ALL HIGH WALLS!!

NO REPELLING OFF OF ANYTHING!

NO ONE IS ALLOWED TO DRIVE THEIR VEHICLE ON ANY PART OF GRAVES MOUNTAIN BEYOND THE PARKING AREA!

(The caretaker must accompany anyone driving beyond the parking area!)

EVERYONE NEEDS TO BE OFF THE MOUNTAIN BY DUSK.

(Absolutely no one is allowed on Graves Mountain after dark.)

Please protect our ability to field collect at Graves Mountain!

Report violations to:
 Clarence Norman, Jr
 Norman C E Wrecking Co
 3333 C E Norman Rd
 Lincolnton, GA 30817-3110
 706.359.3862 (his business)
 or 706.401.3173 (his cell)



Kyanite Graves Mountain, Lincoln County, Ga.



Southeastern Gem & Mineral Shows

OCTOBER 2 – 4, 2015

37th Annual Gaston Gem & Mineral Show

Dallas, NC

Hours: Fri & Sat, 9am - 6pm - Sunday 9am - 5pm

Gaston County Park

1303 Dallas Cherryville Hwy, Dallas NC. 28034



(HWY 279)
 or GPS 120 Leisure Lane, Dallas, NC 28034

From North, 321 south, exit at Dallas and turn right, it is on the left.
 From South, 321 north and take the 2nd exit to "Cherryville". Go over 321 and drive 1/2 mile on left.

FREE ADMITTANCE and FREE PARKING

Minerals and Fossils from around the world.
 Cutting material, Quality Gemstones, Wire wrapping, settings, Geodes, Jewelry, etc.

SLUICE - A real working sluice, \$3 & \$5 sand buckets; perfect for children and adults.
 Amethyst, Quartz Crystals, Faceted Stones mixed at random in buckets; you must get that special stone or treasure!
 Hourly Raffles for Prizes, not just a jewelry show, FUN FOR ALL

Additional information on the show can be directed toward this year's Show Chairman, Rick Perkins, at 704-915-8366

Our website is <http://gastongemclub.weebly.com/>

October 9, 10, & 11, 2015
47th Annual Gem, Jewelry, & Mineral Show
Huntsville Gem & Mineral Society - Huntsville, AL
Fri: 10AM to 6 PM;
Sat: 10 AM to 6 PM; Sun: Noon to 5 PM

Jaycees Community Building - 2180 Airport Rd., Huntsville, AL
 Located west of Memorial Pkwy & east of Leeman Ferry Rd.
 North of Airport Rd. Turn North at Jaycee Dr @ the traffic light.

17 Dealers with Minerals, Gems, Jewelry, & Fossils
 Display Cases, Demonstrations, & Hourly

Doorprizes
 Mining Flume, Fluorescent Room, & Gem Dig for Children

\$3.00 donation at the door, children under 5 - Free.

Show Chairman:
 Tony Smith - tsmith@rc-incorporated.com
 Website <http://www.huntsvillegms.org>

October 16 - 18, 2015
25th Annual Gem & Mineral Show
Knoxville, TN

Knoxville Gem and Mineral Society
Fri. 10:00 AM - 6:00 PM
Sat. 10:00 AM - 6:00 PM
Sun. 11:00 AM - 5:00 PM

Kerbela Temple, 315 Mimosa Ave, Knoxville, TN

Admission: \$5 per person per day or 3 day pass for \$8 per person
 Children under 12 admitted
FREE

The Gem, Mineral and Jewelry Show will have many vendors that offer great products including a wide variety of jewelry; rare fossil and mineral specimens; meteorites; gems of all colors shapes & sizes; lapidary & jewelry equipment; and much more.

For more information, contact Beth Willis
beth.willis2@gmail.com
www.knoxrocks.org/gemshow.html

October 16 - 18, 2015
45th Annual Gem & Mineral Show
Gem & Mineral Society of Louisiana, Inc.

Best Western Landmark Hotel
 2601 Severn Avenue, Metairie, Louisiana
 70002



Dates and Times:

Friday, October 16 10 AM to 6 PM
 Saturday, October 17 10 AM to 6 PM
 Sunday, October 18 10 AM to 4 PM

Admission:

Adults: \$6.00 for a 3-Day Pass
 Students w/ID, Military w/ID and Members:
 \$3.00, Scouts in Uniform Free, Children Under
 12 Free

The 45th Annual New Orleans Gem, Mineral, Fossil & Jewelry Show presented by the Gem & Mineral Society of Louisiana, Inc. at New Orleans, features ~20 dealers exhibiting precious gem stones, Louisiana opals, minerals, fossils, beads and jewelry. Members of the Society will be demonstrating jewelry making, cabochon cutting, and computer interpretation of seismic data and well logs applied to oil exploration.

Featured displays will include fluorescent minerals, dinosaur bones and cabochons made from ballast stones, a reminder of New Orleans early maritime history.

Specials for children include rock grab bags and "polish your own cabochons". The grand prize to be raffled will be a multi-colored stone swan sculpture carved in Brazil.

For information, email:
gemshow2015@gmail.com

October 24, 25 2015
Stuart FL
Annual Club Show
Sponsored by The St. Lucie County
Rock and Gem Club

Saturday Oct 24th from 9-5
 Sunday Oct 25th from 10-4

Martin County Fair Grounds
 2116 Dixie Hwy
 Stuart Fl 34996

Rocks, Minerals, Jewelry and Supplies for sale.

Demonstrations and Displays by Club Members.

for vendor information or more information contact show chairman
 Marcia Robart 772-340-3841

email contact
 President@slcrockandgem.org



For Sale:

Ron Davis is selling most of his Rock, Mineral and Fossil collection and a Facet Machine.

8 inch Facet Machine, made by: Lee Lapidaries of Cleveland, Ohio.

Included disc are:

- 1 – 1200 grit 8 inch Crystalite
- 1 - 260 grit 8 inch Crystalite
- 2 – 8 inch Acrylic laps
- 1 – 8 inch Masterlap
- 1 – 6 inch polishing lap All for \$350.00

Polished Orthoceras fossils on black limestone – a very large plate for \$100.00

All Minerals, fossils, and rock for \$200.00

Call Ron Davis for more information or if interested at: Home: 478-788-2616 or Cell: 478-737-9760



Mid-Georgia Gem Clips
Official Bulletin of Mid-Georgia Gem
and Mineral Society
Macon, Georgia

The Club meets on the First Monday of each Month, at The Museum of Arts and Sciences, in Macon, Georgia.

Except: No meeting January, July, and August. The annual Christmas Party is the first Monday in December. September the first Tuesday of the Month

Purpose: To promote the earth sciences, the lapidary arts, and the collection, study and display of rocks, minerals, and fossils; to promote the public awareness of these efforts in educational and recreational activities.

Club Officers:

President / Web Master: Jim Souter,
 ph. 478-454-7273, jgsouter@windstream.net

Vice President: Phillip Hargrove, 478-862-5327
 Cell 478-550-8199 susanbphilh@pstel.net

Secretary / Photographer, Richard Arnold,
 ph. 678-682-9860 rarnold216@charter.net

Treasurer: Susan Hargrove, 86 Clear Branch Rd,
 Butler Ga. 31006, ph. 478-862-5327,
susanbphilh@pstel.net

Editor / Programs: Jay Batcha,
 4220 Cyndy Jo Circle, Macon, Ga. 31216,
 ph. 478-784-1965, Cell 478-957-5002
rocky1s@cox.net

Education Chairperson: Tuell Walters,
 ph. 478-922-7200
supernova1346@gmail.com

Stamp Program: Ron Davis, ph. 478-788-2616

Club year begins November 1st, a grace period of three months will be given before membership lapses.

Mid-Georgia Gem & Mineral
Society
Application for Membership

Name(s) _____

Address _____

City _____

State _____ Zip Code _____

Phone _____

Adult(18+) \$10.00 Junior \$2.50 New

Renewal _____

E-mail _____

Address _____

List your interests and reasons for joining _____

Make checks payable to:
 Mid-Georgia Gem & Mineral Society
 Mail to the Treasurer (listed on this page) or bring to a meeting.



Mid-Georgia Gem Clips

**Official Bulletin of Mid-
Georgia Gem and Mineral Society
Macon, Georgia**

**Member of Southeast Federation of
Mineralogical and Lapidary Societies
Member of American Federation of
Mineralogical Societies**



Mid-Georgia Gem Clips

Jay Batcha, Editor
4220 Cyndy Jo Circle
Macon, Ga. 31216

Save Commemorative Stamps